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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,633	08/01/2006	Hanspeter Steffen	2360-0435PUS1	8977
2292 7590 09/27/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER FOLEY, SHANON A				
ART UNIT		PAPER NUMBER		
1619				
NOTIFICATION DATE		DELIVERY MODE		
09/27/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/552,633

Applicant(s)

STEFFEN, HANS PETER

Examiner

SHANON A. FOLEY

Art Unit

1619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/7/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/02)
Paper No(s)/Mail Date 10/07/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed October 7, 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. None of the foreign literature documents cited have been provided. Therefore, the IDS has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

Claim 3 is objected to because of the following informalities: "methode", should be "method". Appropriate correction is required.

Claim 8 is objected to because of the following informalities: In line 2, "are containing in" should be replaced with "contain".

Claim 10 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 10 has not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are drawn to a spray-method. It is not clear whether the claims are intending to claim a device that comprises a dual sprayer, or whether the claims are intending to claim a method of protecting crops. The confusion stems from the fact that claims 1-4, 8 and 9 are drawn to "a spray-method" or a "method and technical application", but do not recite any method steps, and are in improper format for method claims. The claims only describe various pieces of machinery. While claims 5-7 do recite a method step, the claims depend from claims 1-4 and it is not clear whether these steps are reciting a functional capability of the device described in claims 1-4, or whether the steps are intended to be active. Since the majority of claims appear to be drawn to a device, due to the lack of recitation of any method steps, the instant claims will be interpreted as a device and the steps recited in claims 5-7 will be treated as intended processes capable of the various apparatus within the device. This interpretation is projected in the interest of compact prosecution and this rejection affects all claims under consideration.

Claims 1 and 5 are additionally confusing due to the recitation of "anorganic" in line 3 of claim 1. Is this word intended to be "an organic", or is it intended to be "inorganic"? Claim 5, which depends on claim 1, states that the plants are pre-wetted with a negatively charged water, which would imply an inorganic wetting agent. In addition, paragraph [0041] of the instant published application, USPGPub 2007/0123422, also states that the plants are pre-wetted with an inorganic wetting agent. Therefore, the misspelled word of "anorganic" in claim 1 will be interpreted as "inorganic" until further clarification from applicant. This rejection affects all dependent claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, Jr. et al. (US 5,816,498), hereinafter "Smith", Pryor (US 6,173,527) and Castenberg et al. (US 5,213,759), hereinafter "Castenberg".

Smith teaches an ozonation system for spraying crops. The device of Smith may be part of a tractor or a platform that is pulled behind a tractor, see column 5, lines 31-36 and comprises an insulated water tank, covered lateral spray-booms with pipings, a water-pressure pump, an air compressor that blows spray mist, an electric generator with control pumps, an air separator for oxygen production, an ozonated water pump, venture valve, turbine mixer for ozone, ozone gas adjuster and an ozone-concentration measurement device, see Figures 1-3D, column 1, line 57 to column 2, line 4, lines 36-67, column 3, line 35 to column 4, line 5, column 5, lines 23-30 and claims 1-11.

Smith does not teach or suggest the device comprising a first tank comprising untreated water for moistening plants and a second tank comprising ozone-containing water that is applied after moistening.

Pryor teaches first irrigating the top soil before applying ozone, see column 3, line 44 to column 4, line 11 and lines 50-59 and column 6, lines 16-36.

One of ordinary skill in the art at the time the invention was made would have been motivated to irrigate the soil prior to applying ozone to encourage nutrient passage to plant cell walls, see column 3, lines 61-67 of Pryor et al.

While Pryor specifically teach that ozone is generated from conventional ultraviolet light, see column 12, lines 19-20, neither Smith nor Pryor teach generating ozone using UV-C lamps.

Castenberg teaches UV-C in combination with a moist ozone kills microorganisms, see column 4, lines 9-14, column 6, lines 41-45 and claims 5, 8 and 9.

One of ordinary skill in the art at the time the invention was made would have been motivated to apply UV-C light to a moist ozone source, taught by Castenberg, to prevent infection of plants.

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANON A. FOLEY whose telephone number is (571)272-0898. The examiner can normally be reached on M-F 5:30 AM-3 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shanon A. Foley/
Primary Examiner
Art Unit 1619